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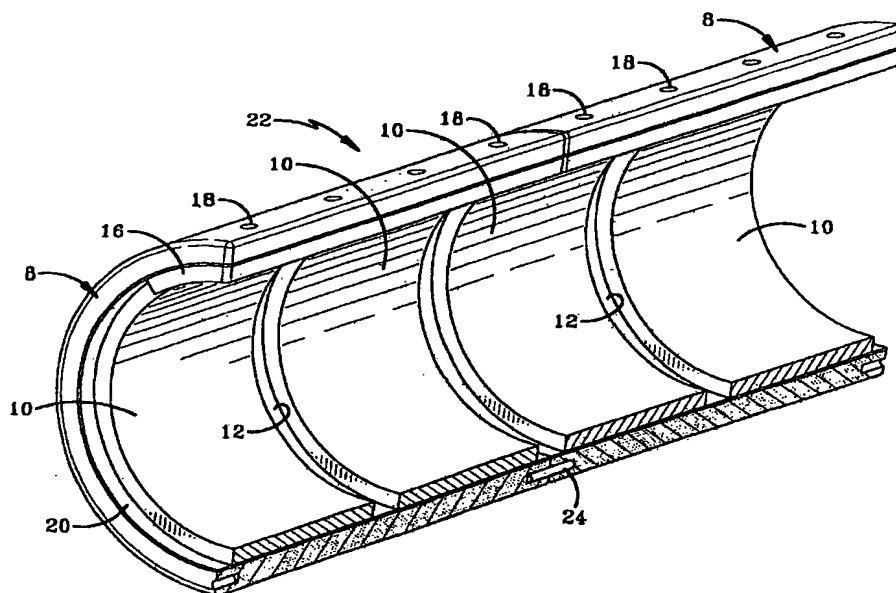
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[Continued on next page]

(54) Title: ACOUSTIC PROJECTOR AND METHOD OF MANUFACTURE



(57) Abstract: An underwater acoustic projector comprising one or more cylindrical shell segments (8), each shell segment (8) having an even number of drivers (10) mounted therein, and the method of manufacturing said projector. The shell segments (8) preferably are formed with a longitudinal slot (14) and have arcuate segments (16), preferably of a dielectric material extending along the sides of the slot (14) for retaining the drivers (10) within the shell segments (8). The combined lengths of the driver is between 70% and 90% of the shell segment (8) length.

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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ,

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04R 17/00, 31/00; H01L 41/08

US CL : 367/142, 159, 162, 169, 176; 310/337; 29/594

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## B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
East text, Japio, Derwent, PG-Pubs, USPAT

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,239,518 A (KAZMAR) 24 August 1993 (24.08.1993), see Fig. 4 and col. 9, lines 10-42.	1, 2, 3, 5, 7, 8 and 9
Y	US 5,220,538 A (FLANAGAN et al) 15 June 1993 (15.06.1993), see Figs. 2 and 2A and col. 4, lines 26-62	4, 6 and 10-14
A	US 5,103,130 A (ROLT et al) 07 April 1992 (07.04.1992), see Figs. 3, 4, 6 and 7	1-14

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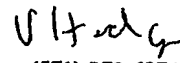
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